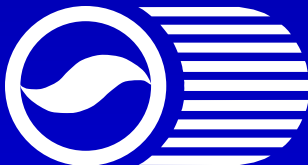


Proposed Amendments to the Diesel Emission Control Strategy Verification Procedure



February 26, 2004



California Environmental Protection Agency

Air Resources Board

Verification Procedure Background

- Adopted May 2002
- Effective June 2003
- Ensures Diesel PM and NO_x Reductions Are Real and Durable
- Requires Warranty Coverage
- Amendments Proposed Dec 2003
 - ◆ NO₂ Limit Temporarily Suspended

Proposed Delay of NO₂ Limit

- Proposal: January 1, 2007
- If No Delay, Filters Not Available
- Effects of Delay
 - No Adverse Air Quality Impacts by 2007
 - Achieve PM Reductions In Meantime
 - Time For More Product Development

Warranty Requirements

| | Currently Adopted | December Proposal |
|----------------------|--------------------|--------------------|
| Warranty Period | 5 yrs / 150,000 mi | 5 yrs / 150,000 mi |
| Engine Damage | YES | YES |
| Vehicle/Equip Damage | YES | NO |

Stakeholder Perspectives on the December Proposal

- Retrofit Manufacturers
 - Potential Warranty Liability Too Great
 - Current Warranty Period Sufficient
- Trucking Industry
 - Warranty Period Should Match Commercial Engine Warranty
 - Engine and Vehicle Should Be Covered
- No Consensus
- Board Directive: Work on Compromise

Revised Warranty Proposal #1

Length of Warranty

- 2 Years / Unlimited Miles Warranty for Heavy Heavy-Duty Trucks That:
 - Are Typically Driven 100,000 Miles or More Per Year (Long Haul Operations) and
 - Have Less Than 300,000 Miles at the Time of Retrofit Installation

Revised Warranty Proposal #2

Examples of Denial

- Explicitly Allow Examples of Circumstances That May Result in Denial of Coverage
- Additional Language Must Be Approved by ARB

Revised Warranty Proposal #3

Burden of Proof

The repair or replacement of any warranted part otherwise eligible for warranty coverage, may be excluded from such warranty coverage ~~at the applicant's discretion~~ if ~~the applicant demonstrates that~~ the diesel emission control strategy, vehicle or engine has been abused, neglected, or improperly maintained, and that such abuse, neglect, or improper maintenance was the direct cause of the need for the repair or replacement of the part.

Stakeholder Positions on Warranty Proposal

| Warranty Coverage | Staff Proposal | CTA & CRRC | Mfr 1 & 2 | Mfr 3 | Mfr 4 | Mfr 5 |
|------------------------------|----------------|----------------------|-----------|------------|-------|------------|
| Engine Included | YES | YES | NO | YES | YES | YES |
| Vehicle Excluded | YES | NO | YES | YES | YES | YES |
| 5 years/ 150,000 mi | YES | YES (Hours based) | YES | YES | YES | YES |
| 2 years / unlimited mi | YES | YES (Miles based) | YES | YES | YES | YES |

Recommendation and Next Steps

- Adopt Proposed Amendments Including the Revised Warranty
- Make NO₂ Limit Proposal to Board in Time for 2007 Compliance

Warranty Summary

| Warranty Type | Verification | New Engine Emission Control Mandated by ARB | New Engine Mechanical Voluntary (OEM) |
|-------------------------|--------------------|--|--|
| Basic Warranty Period | 5 yrs / 150,000 mi | 5 yrs / 100,000 miles | 2-3 yrs / 150,000 – unlimited mi |
| Engine Damage Covered? | YES | YES | YES |
| Vehicle Damage Covered? | NO (proposed) | YES | NO |